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Purpose: To investigate bacterial profile and trend of and factors associated with resistance to antibiotics among uropathogens

Materials and Methods: This is a cross sectional study using reports of urine culture from a regional hospital in Taipei city from year 2006 to 2012. Only the report of the first urine culture for each individual was used for analysis. We analyze bacterial profile and rates as well as trend of resistance to commonly prescribed antibiotics among uropathogens. We used logistic regression to identifying independent risk factors, including sex, age, diabetes, indwelling urethral catheterization, urolithiasis, and urinary tract surgery, of resistance to ciprofloxacin for *Escherichia coli*

Results: *Escherichia coli* was the most common uropathogen followed by *Non-E. coli* Enterobacteriaceae, *Pseudomonas* spp., and *Enterococcus* spp. The percentage of *Escherichia coli* declined from year 2000 to 2007 although not statistically significant. The percentage of *Enterococcus* spp. increased significantly during study period. The resistance rates of *Escherichia coli* to SXT ranged from 42.1% to 47.6% during study period. The resistance rates of *Escherichia coli* to cefazoline, amoxicillin+clavulanic acid, ciprofloxacin, gentamicin, amikacin, ceftazidime, and imipenem were 33.1–62.3%, 33.5–37.4%, 28.9–34.9%, 29.6–23.9%, 2.0–3.1%, 6.9–21.7%, and 0.1%–0.1%, respectively. The resistance rates of *Escherichia coli* to cefazoline and ciprofloxacin increased significantly during study period. The resistance rates of *Non-E. coli* Enterobacteriaceae to cefazoline and ciprofloxacin increased significantly during study period. The resistance rates of *Enterococcus* spp. to ampicillin and penicillin increased significantly during study period. Male sex, aged more than 64 years, indwelling urine catheterization, urolithiasis, and urotract surgery are independent risk factors associated with resistance of *Escherichia coli* to ciprofloxacin.

Conclusion: Understanding the profile of uropathogens and their resistance pattern to commonly prescribed antibiotics is important in treating urinary tract infection.

PD10-2:

ANTIMICROBIAL PROPHYLAXIS AND FEBRILE COMPLICATION OF TRANSRECTAL PROSTATE BIOPSY IN TAIPEI TZUCHI HOSPITAL AND IN TAIWAN

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Purpose: To analyze the antimicrobial prophylaxis (AMP) and febrile complications of transrectal prostate ultrasound-guided biopsy (TRUSPBX) in our hospital and review the current status in Taiwan.

Materials and Methods: We retrospectively reviewed the patients who underwent TRUSPBX from January 2005 to December 2013 in our outpatient department. The patients were divided into two groups: group 1 contains those who took single dose 500 mg. levofloxacin pre-operatively, and group 2 consists those who received more than one dose of antibiotics regardless of medication category. We analyze the febrile outcome and related risks. We also reviewed some literatures who reported their outcome in other hospitals of Taiwan.

Results: Totally 737 patients were included for analysis (628 in Group 1, 109 in group 2). In group 1, 4 patient had fever (0.64%) after operation, while there was no patient experienced febrile complication in group 2 ($p = 0.9$). There were no specific risks for febrile UTI of TRUSPBX in our hospital. The incidence of febrile complications with AMP of single dose levofloxacin is 0.64–1.99% in Taiwan. This regimen was effective and safe as AUA and EUA recommended. More than one dose of antibiotics before or after TRUSPBX is not necessary for patients with low risk of fever.

Conclusion: Single dose levofloxacin as AMP for TRUSPBX is safe and effective in Taiwan This regimen should be more widely use in all patients undergoing TRUSPBX with low risk of infection in Taiwan.

PD10-3:

CLINICAL SIGNIFICANCE OF HPV GENOTYPE, PREFERTIAL LOCATION OR SHAPE OF CONDYLOMA?

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Purpose: To identify the role of HPV genotypes in pathogenesis of condyloma. Doesn't it lead to preferential location in human body or special shape of condyloma?

Materials and Methods: All patients with problems of condyloma were advised to take HPV DNA check. Procedure performed under patient's permission. Sampling brush was sent to laboratory for HPV DNA analysis by COBAS HPV 4800 automatic system, which contained Roche LINEAR ARRAY HPV Genotyping Test system for 37 known genotypes. Specimen of un-determined type will run auto-sequencing method. Sequence alignments were obtained by Genbank's on-line BLAST server.

Results: From Jan.2006 to Dec. 2012, there were 1296 fresh patient with recognizable condyloma. 694 of them were mono-infection (only one HPV genotype identified from lesion). 602 of them were multi-infection (2 to 6 genotypes identified from lesion). Leading 8 types of mono-infection: type 6 in 500 cases, 40 in 33, 44 in 16, 42 in 15, 52 in 15, 58 in 14, 16 in 11, and type 51 in 10 cases. Analysis of mono-infection cases as follow:

	M	F	Age	Location (%)	Shape (%)
Low risk type	440	155	33.9 ± 8.1	m 26.4,s 60.2,ms,13.4	m 7.1, n 62.4, p 25.0,g 5.5
High risk type	42	47	31.3 ± 6.4	m 49.4,s 44.9,ms 5.6	m 14.6,n 52.8, p 31.5,g 1.1

* Location: m = mucosa, s = skin, ms = mucosa + skin

* Shape: m = macular, n = nodular, p = papillary, g = giant type

Conclusion:

1. All HPV identified were belonging to alpha-HPV, according to International Committee of Taxonomy of Virus (ICTV 2002). Groups of B, γ , ϵ , mupa. etc are not found yet.

2. Condyloma in a contagious disease, initial location of lesion determined mostly by contact area during sexual behavior, rather than HPV genotype.

3. Shape and size of condyloma seems to be a balance of HPV virulence and host immunity. High risk type condyloma tend to be a broad base lesion but low risk type tend to be a cauliflower lesion.

PD10-4:

ADDING GENTAMYCIN TO FLUOROQUINOLONE-BASED ANTIMICROBIAL PROPHYLAXIS REDUCES TRANSRECTAL ULTRASOUND-GUIDED PROSTATE BIOPSY-RELATED INFECTION RATE

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Purpose: Transrectal ultrasound(TRUS)-guided prostate biopsy is the standard method for the diagnosis of prostate cancer. Fluoroquinolone-based prophylaxis before a TRUS biopsy of the prostate is the most common regimen worldwide. In this retrospective study, we evaluated the efficacy and cost-effectiveness of adding gentamicin to a fluoroquinolone-based prophylaxis regimen on the patient who received TRUS biopsy of prostate.

Materials and Methods: In total, our study included 263 patients across two groups in this study. Group 1 consisted of 129 patients who received one oral dose of 500 mg levofloxacin daily two days before the biopsy, on the day of the biopsy, and for two days after the biopsy. Group 2 consisted of 134 patients who received a single 80 mg intramuscular gentamycin injection 30 minutes before the biopsy in addition to the same oral levofloxacin protocol as group 1. We recorded and analyzed data including age, indication for a TRUS biopsy of the prostate, prostate volume, comorbidity, infectious complications, blood and urine culture results.

Results: The mean PSA level was 38.653 ± 312.9249 ng/ml (range 4.4 – 2626 ng/ml) in group 1, and 34.843 ± 127.1309 ng/ml (range 2.11 – 1423 ng/ml) in group 2. The groups were similar in terms of mean age, indication for a biopsy, prostate volume and the number of biopsy cores taken, and comorbidities. Infectious-related complications occurred in 8 of